2020 CENSUS PROGRAM MEMORANDUM SERIES: 2021.13

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MEMORANDUM FOR: The Record

From: Albert E. Fontenot, Jr. (signed June 10, 2021)

Associate Director, Decennial Census Programs

Subject: Updates to the 2020 Archiving Operation Detailed Operational Plan

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This memorandum documents specific updates that have been made to the plan for the Archiving Operation (ARC) since the release of the Archiving Detailed Operational Plan (DOP) on October 16, 2018. Changes were related to the impact of the COVID-19 pandemic on the schedule for delivery of artifacts, a Census Bureau office reorganization, and final National Archives and Records Administration (NARA) dispositions from the approved 2020 Records Schedule.

The following table identifies the DOP sections that have been updated per this memo:

Section No.	Section Name	Page	Original Wording	Update
2.2	Background	2	Per NARA, the Census	Removed. Per NARA disposition,
			Bureau will have to provide	images were deemed
			a linkage between the	temporary in the 2020 Records
			individual response data	Schedule and will not be
			and any copies of	transferred to NARA.



			questionnaires on paper or electronic image, as	
			needed.	
2.2.1	Archiving to NARA and the 2020 Census Records Schedule	3	The Archiving operation was also included in the 2018 End-to-End Census Test so that archiving systems could be properly integrated and conform with functional and nonfunctional requirements.	The Archiving operation was included in the 2018 End-to-End Census Test to ensure all official response data and final data products from the 2020 Census would be centrally located. Response data and final data products will either be maintained at headquarters (HQ) for internal research or transferred to NARA. A subset of all systems were examined to test that final data products were sent to the Census Data Lake and data sets were confirmed to be stored for posterity.
2.3.1	High-Level Operational Design	8	Administrative and Customer Services Division (ACSD)	Office name change to Policy Coordination Office (PCO) during Census Bureau reorganization.
2.3.1	High-Level Operational Design	8	When the 2020 Census cycle closes in 2023, overseeing the archiving responsibility will be transferred from the ARC Integrated Project Team (IPT) to the records manager in the Decennial Census Management Division, and the central repositories (CDL and Census Image Retrieval Application [CIRA]) will store the 2020 Census records until the records have reached their disposition. ARC is complete when all final 2020 Census records are in their "final" destination.	Because of COVID-19 pandemic impacts, a subset of operational documents to be archived will not be complete until 2025. When the 2020 Census cycle closes in 2025, overseeing the archiving responsibility will be transferred from the ARC IPT to the records manager in the Decennial Census Management Division and the central repositories (CDL and Census Image Retrieval Application [CIRA]) will store the 2020 Census records until the records have reached their disposition. ARC is complete when all final 2020 Census records are in their "final" destination.
2.3.2	ARC Operational Context	11	ARC uses the following systems: the central repository called Census	ARC uses the following systems: the central repository called Census Data Lake (CDL), which



	T	1		
			Data Lake (CDL), which stores the response data and paradata from the 2020 Census; CIRA, which displays images of paper questionnaires as well as geographic and response data, mainly to execute the Age Search service; the Decennial Applicant, Personnel, and Payroll System (DAPPS), which stores personnel and payroll data to use as reference data for legal inquiries for the decennial program; the DMS receives files according to archiving specifications; and, the Demographic Survey System: Feith (DSS:Feith) that is a counterpart to CIRA and also displays images for the Post-Enumeration Survey.	stores the response data and paradata from the 2020 Census; CIRA, which displays images of paper questionnaires as well as geographic and response data, mainly to execute the Age Search service; the Decennial Applicant, Personnel, and Payroll System (DAPPS), Census Hiring and Employment Check System (CHEC), Recruiting and Assessment (R&A), Census Human Resources Information System (CHRIS), Field Operational Control System (FOCS) and the Demographic Survey System: Feith (DSS:Feith) store personnel and payroll data to use as reference data for legal inquiries for the decennial program; the DMS manages access to files according to archiving specifications.
2.3.2.1	ARC Operational Inputs	13	Image data to be indexed and archived based on NARA requirements, including images for completed questionnaires for housing units and for other unit types such as group quarters (GQs) and transitory locations.	Image data to be archived based on Census Bureau and NARA requirements, including images for completed questionnaires for housing units and for other unit types such as group quarters (GQs) and transitory locations.
2.3.2.4	ARC Operational Mechanisms	20	Data Management System (DMS) is the system that receives files in accordance with the archival specifications.	Data Management System (DMS) is the system that manages access controls for data stored in CDL, in accordance with the archival specifications.
3.	Archiving Operation (ARC) Detailed Process Description	27		Changes made to BPM: 1. Removed 15 year storage period. Per the approved Records Schedule, NARA approved an early



			delivery of files and
			data.
		2.	Addition of the Data
			Transfer Agreement
			and Concept of
			Operations creation.
			These files document
			the transfer process of
			data and files from
			Census to NARA.

The 2020 Census Memorandum Series

The 2020 Census Memorandum Series documents significant decisions, actions, and accomplishments of the 2020 Census Program for the purpose of informing stakeholders, coordinating interdivisional efforts, and documenting important historical changes.

A memorandum generally will be added to this series for any decision or documentation that meets the following criteria:

- 1. A major program-level decision that will affect the overall design or have significant effect on 2020 Census operations or systems.
- 2. A major policy decision or change that will affect the overall design or significantly impact 2020 Census operations or systems.
- 3. A report that documents the research and testing for 2020 Census operations or systems.

Visit 2020 Census on Census.gov to access the Memorandum Series, the 2020 Census Operational Plan, and other information about preparations for the 2020 Census.



2020 Census Detailed Operational Plan for: 25. Archiving Operation (ARC)

A New Design for the 21st Century

Issued: October 16, 2018

Version: 1.0

Prepared by: Decennial Census Management Division







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Approvals

This ARC Detailed Operational Plan has been reviewed and approved for use.

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Document Change History

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1	v0.01	February 15, 2018	Initial Working DRAFT Version from 2020 Census DOP template. • Uses Annotated version of ARC BPM Version 4.8.
2	v0.02	July 12, 2018	Incorporates updated IDEF0, IE Descriptions, BPM v 5.0, and text descriptions.
3	v1.0	September 10, 2018	Executive Review version

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Table of Contents

1.	Docu	ument Purpose	1
2.	Oper	rational Overview	2
2	.1 C	Operation Purpose	2
2	.2 В	Background	2
	2.2.1	Archiving to NARA and the 2020 Census Records Schedule	3
	2.2.2	Archiving for Age Search at NPC	4
	2.2.3	Archiving for Research and Reference	4
	2.2.4	Overview of Archiving Definitions (Terminology)	4
	2.2.	.4.1 Records	5
	2.2.	.4.2 Types of Records	5
	2.2.	.4.3 Records Schedules	6
	2.2.	.4.4 Records Management	7
	2.2.	.4.5 Archiving	7
	2.2.	.4.6 Centrally Located Data	7
2	.3 D	Design Overview	7
	2.3.1	High-Level Operational Design	7
	2.3.2	ARC Operational Context	9
	2.3.	.2.1 ARC Operational Inputs	. 11
	2.3.	.2.2 ARC Operational Controls	. 15
	2.3.	.2.3 ARC Operational Outputs	. 17
	2.3.	.2.4 ARC Operational Mechanisms	. 18
2	.4 A	ARC Data Flow and Operational Influences	. 20
3.	Arch	niving Operation (ARC) Detailed Process Description	.27
3	.1 C	Census Records Planning and Coordination [ARC 25-1]	. 28
	3.1.1	Develop 2020 Census Records Schedule [ARC 25-1.1]	. 29
	3.1.2	Coordinate 2020 Census Records Disposition [ARC 25-1.2]	. 30
3	.2 R	Records Products Preparation and Delivery [ARC 25-2]	. 31
	3.2.1	Prepare Permanent Retention Records for Delivery to NARA [ARC 25-2.1]	. 32

3.2.2 Coordinate and Deliver Files for Age Search to NPC [ARC 25-2.2]	34
3.2.3 Make Available Internal Files for Research and Reference for Future Use 25-2.3] 34	e [ARC
3.3 ARC Operation Closeout [25-3]	35
3.3.1 Closeout ARC Operation [25-3.1]	36
3.4 External Post-ARC Census Bureau Activities	37
3.4.1 Deliver Data to NARA	38
4. Cost Factors	40
4.1 Background	40
4.2 Relevant IDEF0 Mechanisms	40
5. Measures of Success	41
Appendix A – Acronyms and Terminology	42
Appendix B – References	
Appendix C – Activity Tree for Archiving Operation (ARC)	
Appendix D – NARA and Census Correspondence, 1952	49
List of Figures	
Figure 1: Archiving Operation (ARC) Context Diagram	10
Figure 2: 2020 Census Data Products and Archiving- Integrated Operations Diagram (IOD) 22
Figure 3: ARC Operation Context Model	27
Figure 4: Census Records Planning and Coordination [ARC 25-1] Constituent Activiti	es 28
Figure 5: Develop 2020 Census Records Schedule	29
Figure 6: Coordinate 2020 Census Records Disposition	30
Figure 7: Records Products Preparation and Delivery [ARC 25-2] Constituent Activities	es 31
Figure 8: Prepare Permanent Retention Records for Delivery to NARA	32
Figure 9: Coordinate and Deliver Files for Age Search to NPC	34
Figure 10: Make Available Internal Files for Research and Reference for Future Use	35
Figure 11: ARC Operation Closeout [25-3] Constituent Activities	36

2020 Census Detailed Operationa	l Plan for:
25. Archiving Operation (ARC)	

Page	iii
1 agc	111

Figure 12: External Post-ARC Census Bureau Activities	. 38
List of Tables	
Γable 1: ARC Operational Inputs	. 12
Γable 2: ARC Operational Controls	. 16
Γable 3: ARC Operational Outputs	. 17
Γable 4: Staff Resources Used Within ARC Operational Activities	. 19
Γable 5: Infrastructure Sites for ARC Operational Activities	. 19
Γable 6: Systems Used Within ARC Operational Activities	. 19
Γable 7: Acronyms and Abbreviations List	. 42
Γable 8: Glossary of Terms	. 45

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1. Document Purpose

The 2020 Census Detailed Operational Plan for the Archiving operation (ARC) is intended for use by U.S. Census Bureau managers, staff, contractors, and other internal and external stakeholders working on the 2020 Census. The document presents the detailed operational design for the 2020 Census Archiving operation and includes a summary of the operational processes involved, their inputs, outputs, controls, and the basic mechanisms employed to conduct the operational work.

Anticipated uses of this document include the following:

- Communication—Documents operational design details for internal and external stakeholders.
- Planning—Documents planning assumptions and key milestones.
- Staffing—Documents staffing needs and strategies.
- Design—Describes operations and flows, which inform design of IT systems, manual processes, and training.
- Development—Identifies business rules and required capabilities to be developed.
- Testing—Provides a basis for developing integrated test plans for IT systems and processes.

This document complements the 2020 Census Operational Plan, which presents the 2020 Census operational design and covers all operations required to execute the 2020 Census, starting with precensus address and geographic feature updates and ending once census data products are disseminated and coverage and quality are measured.

2. Operational Overview

2.1 Operation Purpose

The Archiving operation performs the following functions:

- Creates the records schedule, which is a listing of all 2020 Census records that could be
 delivered to the National Archives and Records Administration (NARA). These records
 are selected based on a schedule of documents executed between NARA and the Census
 Bureau. Based on the official determination made by the Archivist of the United States,
 records will either be permanently retained at NARA or temporarily retained for
 destruction at the Census Bureau.
- Coordinates storage of materials and data and provides records deemed permanent as the official data of the 2020 Census, including files containing the individual responses to the 2020 Census, to the National Archives and Records Administration (NARA).
- Provides similar files to the National Processing Center (NPC) to use as source materials to conduct the Age Search Service.
- Stores data to cover in-house needs.

2.2 Background

The Archiving (ARC) operation is necessary to support legislative mandates.

Last decade, ARC included final census records that were in the 2010 Census Records Schedule. This involved creating the 2010 Census Records Schedule, the 2010 Records Transfer Plan, and the coordination of delivery of these records to NARA.

Operational innovations for 2020 include participation in cloud implementation between the Census Bureau and NARA as a solution for archiving electronic records.

The Census Bureau must provide copies of the individual responses to the 2020 Census (including names and addresses) to NARA. The specific format, media, and timing for the delivery is negotiated between the Census Bureau and NARA. Per NARA, the Census Bureau will have to provide a linkage between the individual response data and any copies of questionnaires on paper or electronic image, as needed. This operation also provides similar data and documents to support the Census Bureau Age Search service at the NPC in Jeffersonville, Indiana.

ARC supports the records management process for the 2020 Census and is responsible for producing the Census Bureau Records Schedule relating to the 2020 Census. The records schedule is a listing of all artifacts produced during the 2020 Census by all operations.

The resulting Records Schedule is provided to NARA, who determines whether the records are "temporary" or "permanent." Records with a temporary disposition that are in scope for the ARC are destroyed by the Census Bureau once they are no longer needed to support the 2020 Census.

Records with a permanent disposition are delivered to NARA for permanent retention, where they are preserved and stored for 72 years before they are released to the public. According to the "72-Year Rule" (92 Stat. 915, Public Law 95-416), after the decennial census collects information from individuals, the federal government will not release personally identifiable information to another individual or agency until 72 years after it was collected. In 1952, the Director of the Census Bureau and the Archivist of the United States corresponded concerning this matter, which is provided in Appendix D.

Permanent records are retained as defined by the retention policy. In addition, requirements are developed for retention of records needed for Census Bureau research and legal purposes. When possible, 2020 Census data are planned for delivery to NARA in electronic format.

Specific NARA staff have been trained and are dedicated to working with census records. These staff members have been granted Special Sworn Status to handle census records after demonstrating that they have suitable background clearance and have taken the Title 13 and Title 26 Awareness Training.

2.2.1 Archiving to NARA and the 2020 Census Records Schedule

The first census of the United States occurred in 1790, and a census of the population has occurred every 10 years thereafter. NARA has obtained and retained all census records for every census beginning in 1790 with the exception of 1890, for which most records were destroyed in a 1921 fire. The 1952 Exchange of Correspondence between the Archivist and the Director of the Census Bureau—appended to Title 44 USC, Chapter 21.2108—outlines NARA use, custody, and maintenance of decennial census questionnaires and microfilm, in particular, the information disclosure to the public, 72 years after the enumeration date of the census for research purposes. By law, decennial census results are archived and released to the public 72 years after the census.

In the 2010 Census, the Archiving operation started in the "9" year, however, it was recommended by the 2010 archiving team that the 2020 Census Archiving operation start the planning earlier in the life cycle. Therefore, for the 2020 Census, the Archiving operation began in FY 2016.

The Archiving operation was also included in the 2018 End-to-End Census Test so that archiving systems could be properly integrated and conform with functional and nonfunctional requirements. This ensures that ARC is ready to go into production for the 2020 Census.

A key innovation for the 2020 Census is the participation in cloud implementation as a solution for archiving electronic records. The creation of a central repository, Census Data Lake (CDL), is new and entails the Census Bureau storing 2020 Census records until their disposition is final or the records need to be transferred to NARA.

2.2.2 Archiving for Age Search at NPC

The Census Bureau is legally authorized to provide an Age Search service to the public. The Census Bureau has the ability to search confidential records from the federal population censuses of 1910 to 2010 and issue an official transcript of the results for a fee.

Individuals can use these transcripts, which may contain information on a person's age, sex, race, state or country of birth, and relationship to the householder, as evidence to qualify for Social Security and other retirement benefits, in making passport applications, to prove relationship in settling estates, in genealogy research, etc., or to satisfy other situations where a birth or other certificate may be needed but is not available.

https://www.census.gov/topics/population/genealogy/agesearch.html

The Archiving operation ensures that the proper records are transferred to NPC so they can execute the legally authorized Age Search service.

2.2.3 Archiving for Research and Reference

The Census Bureau is a research institution and may use some of these records for research and planning future censuses. These records/documents are stored in a central repository and accessed through the Data Management System (DMS). Since the majority of Census Bureau records are sensitive, controlled access is required to retrieve any and all data within the central repository. Users who need to access the records must submit a request using DMS. This request is reviewed by various levels of management and authority within the Census Bureau. Upon approval, the access privilege is granted to the user by DMS and directed to the central repository.

2.2.4 Overview of Archiving Definitions (Terminology)

An "archive" is a permanent repository for data and other records that have been determined to be of special importance. NARA is the federal government's record keeper. Of all documents and materials created in the course of business conducted by the United States federal government, only 1 to 3 percent are so important for legal or historical reasons that they are kept by NARA forever. Those valuable records are preserved and are available for use and reference by the public.

Certain Census Bureau records are determined by NARA as having sufficient historical or other archival value to warrant continued preservation by the federal government beyond the time they are needed for administrative, legal, or fiscal purposes. These records are permanently retained by and at NARA. Included in this group are records pertaining to the 2020 Census.

2.2.4.1 Records

The definition of "records" includes all recorded information, regardless of form or characteristics. These materials are produced by the Census Bureau pursuant to federal law or in connection with the transaction of public business. The Census Bureau preserves records as evidence of its organization, functions, policies, decisions, procedures, operations, or activities. The Census Bureau does not include library materials made, acquired, or preserved for reference, nor stocks of publications of processed documents. The Census Bureau classifies all records as either permanent or temporary with regards to the informational value of data in them.

2.2.4.2 Types of Records

Permanent Records

Permanent records have enduring value. Examples include those that document the organizations, functions, policies, decisions, procedures, and essential transactions of the Census Bureau or contain information of significant historical, legal, or research value. These records are offered to NARA according to their disposition authority.

Temporary Records

Temporary records do not have sufficient value to justify permanent retention and are destroyed after the retention period has been met. DAO 205-1, Section 2, provides additional definitions regarding types of records.

Unscheduled Records

Unscheduled records are records whose final disposition has not been approved by NARA. Unscheduled records are considered permanent and may not be destroyed or deleted.

Vital Records

Vital records are the Census Bureau's most essential and irreplaceable records that are needed to meet operational responsibilities under national security emergencies or other emergency or disaster conditions (emergency operating records) and to protect the legal and financial rights of the government and those affected by government activities (legal and financial rights records). See Title 36, Code of Federal Regulations (CFR), Section 1236.14. These records are also located in the Census Bureau's Continuity of Operations (COOP) plan.

Nonrecords

Nonrecords are government owned informational materials that are excluded from the legal definition of records. Examples are personal papers, magazines and journals, extra copies of documents kept only for convenience of reference, stocks of publications, and library or museum materials intended solely for reference or exhibition.

Electronic Records

Electronic records are created, used, maintained, transmitted, and disposed of in electronic form. They consist of information in various formats, including textual documents such as processing files or electronic mail messages, images such as maps or pictures, internet content, and computer code. Electronic records may be stored in computer memory or on an approved storage media. They may or may not have paper backup.

Email Records

Email records can either be temporary or permanent. Once it has been determined whether a record is permanent or temporary, the current policy for email records is executed based on the Presidential Directive Managing Government Records Directive (M-12-18), which mandates federal agencies to manage all email records in an electronic format until the retention period has been met, according to the appropriate records schedule.

Capstone Officials

Capstone officials are senior officials. This includes officials at or near the top of the Department of Commerce and the Census Bureau. This includes but is not limited to personnel at GS-15 and above. All email records for Capstone officials are considered permanent.

2.2.4.3 Records Schedules

Records schedules provide retention and disposition instructions for Census Bureau records. NARA requires the Census Bureau to save all records identified as "permanent," including records stored in electronic media. The records schedules provide guidance for both types of records (permanent or temporary) and for the storage or disposition of each type.

The two types of records schedules are as follows:

General Records Schedule

These schedules, published by NARA, govern the retention and disposition of administrative records common to all federal agencies.

Census Bureau Records Schedules

These schedules govern the retention and disposition of program records.

2.2.4.4 Records Management

Records management is the process for systematic control of the creation, maintenance, use, and disposition of records, following statutory and regulatory requirements. It addresses the complete life cycle of records. This process contributes to the smooth operation of agency programs by making information readily available; provides continuity in the event of a disaster; protects records from inappropriate and unauthorized access; and meets statutory and regulatory requirements, including archival, audit, and oversight activities.

2.2.4.5 Archiving

Archiving is the process for NARA to determine which records have sufficient historical or other archival value to warrant continued preservation by the federal government beyond the time they are needed for administrative, legal, or fiscal purposes. This process allows for the permanent retention of records by and at NARA.

2.2.4.6 Centrally Located Data

A key innovation for the 2020 Census is the creation of a central data repository that will allow approved users to access 2020 Census records when appropriate. This repository, Census Data Lake (CDL), will include final 2020 Census data.

Records are stored electronically before they are available to be accessed for research and planning purposes, transferred to NARA for posterity, or disposed of per the 2020 Census Records Schedule.

2.3 Design Overview

The sections below present the high-level design for the Archiving operation. Please refer to the 2020 Census Operational Plan for a complete inventory of design decisions for all 2020 Census operations.

2.3.1 High-Level Operational Design

The design of the Archiving operation for the 2020 Census includes three major operational activity areas:

- Census Records Planning and Coordination.
- Records Products Preparation and Delivery.

• ARC Operation Closeout.

Each of these major activity areas is summarized below. Together, these activities represent the complete set of work that needs to be performed to conduct this operation.

The full hierarchy of activities for ARC is provided in Appendix C in the form of an Activity Tree. In the Activity Tree, each major operational activity area listed above is numbered and then decomposed into a numbered set of subactivities, some of which are further decomposed into more detailed numbered subactivities or steps.

For a full description of the operational subactivities that comprise the ARC operation, see the Detailed Process Description discussions in Section 3 below.

Census Records Planning and Coordination

The Archiving Integrated Project Team (IPT) is responsible for the coordination of the 2020 Census Records Schedule relating to all 2020 Census records created for the 2020 Census. The team will need to review the 2020 Census Records Schedule and determine archiving recommendations for all applicable data and materials. A determination is made of what systems/operations are producing the records, where the records will be stored, and when they will be transferred/disposed. The team will work with the Census Bureau's records manager in the Administrative and Customer Services Division (ACSD) to revise schedules into a single, comprehensive 2020 Census Records Schedule. The team must also work with the Policy Coordination Office (PCO), the Office of Information Security (OIS), and the Security Office (SEC), who will advise the team on all applicable polices and regulations.

Records Products Preparation and Delivery

This stage is where the 2020 Census Records Schedule is approved by NARA. Files are flagged per their disposition and test files are sent to NARA for confirmation. All files go to their "final" destination within the Census Bureau for the Archiving operation. Files will be stored in either the Census Data Lake (central repository), headquarters, or at NPC. Other files needed for research and reference are made available for researchers to access after the 2020 Census Archiving operation closes.

ARC Operation Closeout

The planning phase of the ARC operation began in 2016 with the development of the records schedule for delivery to NARA. When the 2020 Census cycle closes in 2023, overseeing the archiving responsibility will be transferred from the ARC IPT to the records manager in the Decennial Census Management Division and the central repositories (CDL and Census Image Retrieval Application [CIRA]) will store the 2020 Census records until the records have reached

their disposition. ARC is complete when all final 2020 Census records are in their "final" destination.

Please note: the records will not reach their full retention period until after the ARC closeout for the 2020 Census. Therefore, the "final" destination (above) refers to where all 2020 Census files will be stored for the retention period, according to the 2020 Census Records Schedule. The actual transfer of permanent records to NARA and the destruction of temporary files is included on the context model, however, this occurs up to 15 years after the files are initially stored in their "final" destination.

2.3.2 ARC Operational Context

The Archiving operational activities described above are conducted within the context of other 2020 Census operations and other programs or data sources that are external to the 2020 Census Program. One way to depict an operational context is by using a "Context Diagram," which shows the boundary of the operational process, the operational activities it contains, and the information exchanged with its neighbor operations (or other entities) as well as the resources (mechanisms) needed to conduct the operational work.

Figure 1 is a top-level context diagram for ARC represented as an Integrated Definition, Level 0 (IDEF0) model. An IDEF0 model of a process (or operation) shows the Inputs, Controls, Outputs, and Mechanisms of the process. These IDEF0 model elements are summarized below and described further in the sections that follow.

The yellow box in the center of the IDEF0 model lists the major operational activity areas for the operation, numbered as given in the ARC Activity Tree in Appendix C. Specific Information Exchanges (IE) are shown in different colored boxes to represent the Inputs (green boxes on left side), Outputs (orange boxes on right side), Controls (purple boxes on top), and Mechanisms (blue boxes on the bottom). Boxes to the left of the Inputs indicate the *Provider* of the inputs to the operation (typically another 2020 Census operation or an external source). The Provider of the Controls is noted in the box itself. Boxes to the right of the Outputs indicate the *Receiver* of the outputs (typically another 2020 Census operation or external entity). Each IE has a name and a unique number for identification purposes.

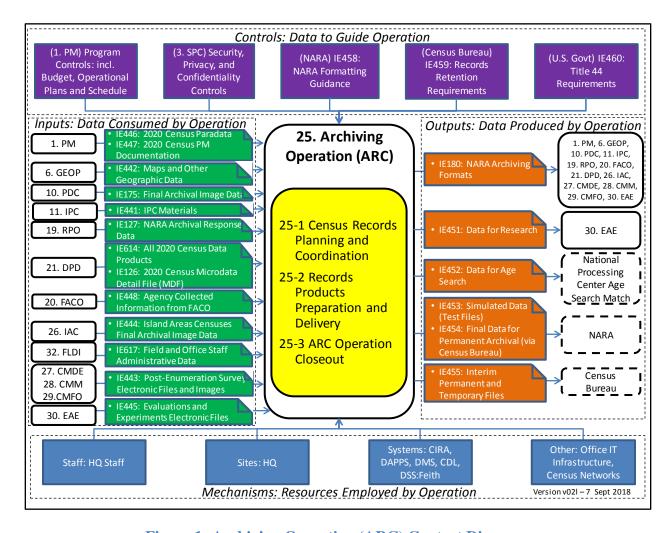


Figure 1: Archiving Operation (ARC) Context Diagram

ARC receives data from multiple operations, some data directly from those operations and other data from intermediaries such as Program Management (PM) and Response Processing (RPO). The data ARC catalogs not only includes the responses to the census, but paradata describing how those responses are collected, data products derived from census data, personnel data, communications plans, and data about experiments conducted to evaluate ways to improve the survey process.

Controls include program management reports, such as budget, operational plans and schedule help to maintain best practices throughout the Archiving operation. The transferring of files to an external agency requires interaction with the Security, Privacy, and Confidentiality (SPC) operation. SPC will guide ARC through security in compliance with all applicable standards. The ARC is also responsible for implementing privacy and confidentiality in compliance with all

applicable standards, including Title 5, Title 13, and Title 26 in accordance with the guidance of the SPC operation. The PCO also provides additional policy guidance. NARA's formatting requirements will provide guidance on the types of permanent files to transfer. The Census Bureau's Records Retention Requirements will also be upheld for temporary files. The ARC is also responsible for remaining in compliance with Title 44 requirements to ensure Census data will be archived for disclosure to the public for research purposes 72 years after the completion of the Census.

ARC provides the following outputs:

- Guidance to various operations on the data formats acceptable to NARA for archiving purposes.
- Permanent and temporary files, including a detailed listing of those files on the 2020 Census Records Schedule.
- 2020 Census records for permanent retention at NARA.
- Data for Age Search to NPC.
- Data for research and planning of future censuses.
- Reference data for legal inquiries, including personnel data.

The staffing mechanisms used by the Archiving operation include headquarters staff to manage the ARC operation. Infrastructure at headquarters sites are built to support the management of the ARC operation. ARC uses the following systems: the central repository called Census Data Lake (CDL) which stores the response data and paradata from the 2020 Census; CIRA which displays images of paper questionnaires as well as geographic and response data, mainly to execute the Age Search service; the Decennial Applicant, Personnel, and Payroll System (DAPPS) that stores personnel and payroll data to use as reference data for legal inquiries for the decennial program; the DMS receives files according to archiving specifications; and, the Demographic Survey System: Feith (DSS:Feith) that is a counterpart to CIRA and also displays images for the Post-Enumeration Survey.

Staff – Headquarters staff perform the archiving operation.

Locations – Staff located at the Census Bureau headquarters at the Suitland Federal Center, Suitland, Maryland, carries out the archiving operation.

For detailed descriptions of the Inputs, Controls, Outputs, and Mechanisms used by ARC, see the sections that follow.

2.3.2.1 ARC Operational Inputs

Inputs are the data that are consumed by the operation. The inputs define the amount of operational work that needs to be performed.

Table 1 lists the inputs to the Archiving operation.

Table 1: ARC Operational Inputs

Provider	Information Exchange	Description
1. Program Management operation (PM)	IE446: 2020 Census Paradata	Relevant 2020 Census paradata sent from multiple operations to PM required to be archived. The paradata is collected by PM per their configuration management policies and sent on to ARC.
1. Program Management operation (PM)	IE447: 2020 Census PM Documentation	Relevant 2020 Census Program Management documentation required to be archived. Includes project plans, strategic and governance documents, operational design documents, program and project management documents, management plans and artifacts, etc.
		Also includes planning documents and related artifacts from other operations including training documentation, procedural scripts, and final versions of approved questionnaires and other public use forms.
6. Geographic Programs operation (GEOP)	IE442: Maps and Other Geographic Data	Includes digital representations of all census-required map features (streets, roads, railroad tracks, rivers, etc.), geographic entity boundaries, and the geographic identification codes used by the Census Bureau to tabulate the data. Also includes reference maps, thematic maps, cartographic records, and Topologically Integrated Geographic Encoding and Reference (TIGER) Shapefiles. The Master Address File (MAF), related coverage measurement studies, and geographic reference files are also included. Geographic data include updates submitted to GEOP from multiple operations.

Provider	Information Exchange	Description
10. Paper Data Capture operation (PDC)	IE175: Final Archival Image Data	Image data to be indexed and archived based on NARA requirements, including images for completed questionnaires for housing units and for other unit types such as group quarters (GQs) and transitory locations.
11. Integrated Partnership and Communications operation (IPC)	IE441: IPC Materials	IPC materials required to be archived including relevant promotional, marketing and communication materials, documents, and other artifacts. Includes documents from the various IPC components such as paid advertising, Statistics in School (SIS), partnership plans, etc., as well as documents from IPC Media Support and 2020 Census promotional materials.
19. Response Processing Operation (RPO)	IE127: NARA Archival Response Data	Response files sent to the Archiving operation in accordance with the NARA archiving specifications.
		This includes the Census Unedited File (CUF), the Individual Census Record File (ICRF), the Island Areas Census Unedited File (IA CUF), and the Island Areas Census Record File (IA ICRF).

Provider	Information Exchange	Description
21. Data Products and Dissemination	IE614: All 2020 Census Data Products	Encompasses the 2020 Census data products, including:
operation (DPD)		 State population totals for apportionment. Redistricting data. Summary data (block). American Indian and Alaska Native Summary. Demographic Profiles Summary Data (Characteristic Iterations). Congressional district summary. State Legislative District Summary File. Public Use Microdata Sample (PUMS). Island Area Data Products (electronic). Also includes the data that DPD receives from Federally Affiliated Count Overseas operation (FACO) and Count Question
		Resolution operation (CQR). See the 2020 Records Schedule for additional details on these data products.
21. Data Products and Dissemination operation (DPD)	IE126: 2020 Census Microdata Detail File (MDF)	The input files for the 50 States, D.C., and Puerto Rico for tabulation that have been processed through consistency edits and disclosure avoidance modeling to protect privacy and confidentiality.
20. Federally Affiliated Count Overseas operation (FACO)	IE448: Agency Collected Information from FACO	Materials for archiving (records and images, final forms, letters, etc.).
26. Island Areas Censuses operation (IAC)	IE444: Island Areas Censuses Final Archival Image Data	Island Area Archival Image Data include images for questionnaires completed during IAC data collection, IA CUF and IA ICRF.

Provider	Information Exchange	Description
32. Field Infrastructure operation (FLDI)	IE617: Field and Office Staff Administrative Data	All recruiting, payroll, personnel, hiring, retention, and time and expense data for temporary field and office staff, much of which comes from the Decennial Applicant, Personnel and Payroll System (DAPPS). These data are used for legal inquiries regarding the 2020 Census.
27. Coverage Measurement Design & Estimation operation (CMDE) 28. Coverage Measurement Matching operation (CMM) 29. Coverage Measurement Field operations (CMFO)	IE443: Post-Enumeration Survey Electronic Files and Images	Includes multiple files collected during Post-Enumeration Survey. Examples include: Survey sample and estimation files. Coverage reports. Paper form images for Coverage Measurement field operations. Electronic files for Person Interview (PI). Electronic files containing data from Independent Listing (IL) data. Electronic data from matching operations.
30. Evaluations and Experiments operation (EAE)	IE445: Evaluations and Experiments Electronic Files	Includes relevant details about the assessments and evaluations of experimental activities to support planning for future censuses. This includes evaluation, assessment and experiment study plans and reports, as well as evaluation and experiment special follow-up data sets.

2.3.2.2 ARC Operational Controls

Controls are the data that guide the behavior of the operation. They are not consumed by the operation, but rather they provide guidance, models, limits, criteria, cutoff dates, or other information that controls the way in which the operational work is performed.

Table 2 lists the controls for the Archiving operation.

Table 2: ARC Operational Controls

Provider	Information Exchange	Description
1. Program Management operation (PM)	Program Controls	Program control information including: Budget. Operational Plans. Schedule.
3. Security, Privacy, and Confidentiality operation (SPC)	Security, Privacy, and Confidentiality Controls	Laws, policies, regulations, and guidelines related to physical security, IT security, data security and privacy and confidentiality impacts, analyses, and processes. These include but are not limited to Title 13, Title 26, and other laws and policies related to protection of personally identifiable information.
National Archives and Records Administration (NARA)	IE458: NARA Formatting Guidance	Guidance from NARA describing their acceptable format for records in keeping with NARA standards.
Census Bureau IE459: Records Retention Requirements		Guidance on what types of records must be retained and for how long in order to satisfy Census Bureau records retention needs.
U.S. Government	IE460: Title Requirements	Requirements for Census Bureau data to be archived for disclosure to the public for research purposes 72 years after the completion of the 2020 Census in accordance with Title 44.

2.3.2.3 ARC Operational Outputs

Outputs are the data produced by the operation. The outputs constitute the results of operational work that has been performed. Outputs produced may be used as inputs or controls to other operations.

Table 3 lists the outputs from the ARC operation.

Table 3: ARC Operational Outputs

Consumer	Information Exchange	Description
1. PM, 6. GEOP, 10. PDC, 11. IPC, 19. RPO, 20. FACO, 21. DPD, 26. IAC, 27. CMDE, 28. CMM, 29. CMFO, 30. EAE	IE180: NARA Archiving Formats	Acceptable archiving formats to assist in determining how to prepare response records for archiving based on NARA and Census requirements.
30. Evaluations and Experiments operation (EAE)	IE451: Data for Research	Data used for research to support planning that is performed by EAE for the future censuses.
National Processing Center Age Search	IE452: Data for Age Search	Data used to support National Processing Center's Age Search service.
NARA	IE453: Simulated Data (Test Files)	Test files containing mocked-up or simulated data used to confirm the method used to transfer records to NARA.
NARA	IE454: Final Data for Permanent Archival (from Census Bureau)	Final data sent to NARA for archival after the 2020 Census is complete in accordance with the 2020 Census Records Schedule.
		The responsibility for transfer to NARA is assumed by the Census Bureau after the Archiving operation completes.

Consumer	Information Exchange	Description
Census Bureau	IE455: Interim Permanent and Temporary Files	ARC receives a number of files from various operations that are initially considered Unscheduled Records until the Archivist of the United States at NARA signs the 2020 Census Records Schedule. All Unscheduled Records are designated as permanent. Census Bureau retains these files after ARC closes out, for eventual NARA delivery and other purposes. When reviewing the 2020 Census Records Schedule, NARA may decide to change the Census-recommended designation of these files from Permanent to Temporary before delivery, effectively saying NARA does not want or need them. Conversely, NARA may decide to change the Census Bureau-recommended designation of files designated as Temporary to Permanent before delivery, effectively deciding they are appropriate for NARA archiving. These files designated as either Temporary or Permanent are stored in CIRA, CDL, and/or SharePoint. At the appropriate time, the Census Bureau will transfer the files that remain designated as permanent to NARA.

2.3.2.4 ARC Operational Mechanisms

Mechanisms are the resources (people, places, and things) that are used to perform the operational processes. They include staff resources, infrastructure sites, systems, and other technology infrastructure.

Staff Resources

Table 4 identifies the Staff Resources employed for the ARC operation.

Table 4: Staff Resources Used Within ARC Operational Activities

Staff Resources	Description/Role
Headquarters (HQ) Staff	HQ staff to manage the ARC operation.

Infrastructure Sites

Table 5 identifies the infrastructure sites employed for the ARC operation.

Table 5: Infrastructure Sites for ARC Operational Activities

Infrastructure Site	Description/Role
Headquarters (HQ)	HQ sites to support the management of the ARC operation.

Systems and other Technology Infrastructure

Table 6 identifies the systems employed for the ARC operation.

Table 6: Systems Used Within ARC Operational Activities

System	Description
Census Image Retrieval Application (CIRA)	CIRA displays decennial census images of paper questionnaires as well as geographic and response data. It provides a user interface for reviewing the images and data and is used to provide an Age Search service to the public at National Processing Center (NPC).

System	Description
Decennial Applicant, Personnel and Payroll Systems (DAPPS)	The Decennial Applicant, Personnel and Payroll System (DAPPS) is an application to support the applicant, personnel, and payroll processing for the 2020 Census. DAPPS is a commercial off-the-shelf software from Oracle/PeopleSoft, customized to meet unique Census requirements and interfaces with other federal agencies' administrative systems. DAPPS is part of the Decennial Administrative Support Services Human Capital Management 2020 Census Solution Architecture.
Data Management System (DMS)	Data Management System (DMS) is the system that receives files in accordance with the archival specifications.
Census Data Lake (CDL)	The Census Data Lake serves as the repository for paradata and response data. It is built on a distributed, scalable platform to support data ingest, storage, provide data access to reporting and analytics applications.
Demographic Survey System: Feith (DSS:Feith)	Demographic Survey System: Feith (DSS:Feith) is the counterpart to CIRA for the Post-Enumeration Survey that provides the ability to search, retrieve, and view the images.

Other Technology Infrastructure employed for ARC include:

- Office IT infrastructure at headquarters for conducting Archiving operational work. This infrastructure is provided by the IT Infrastructure operation (ITIN).
- Census network connectivity for data transmission between operational systems and operational sites. This connectivity is provided by ITIN.

2.4 ARC Data Flow and Operational Influences

Figure 2 is an Integrated Operations Diagram (IOD), which describes the design concepts for all 2020 Census operations associated with the development and dissemination of 2020 Census data products covering the 50 states, the District of Columbia, and Puerto Rico. The Data Products and Dissemination operation is the primary operation involved in these activities. DPD receives data from the Response Processing operation (RPO), the Geographic Programs operation (GEOP), and the Federally Affiliated Count Overseas operation (FACO) to create apportionment data products (counts), which are delivered to the President for use by Congress for apportioning

seats in the House of Representatives. Data from RPO and GEOP are also used to create redistricting data products for use by the states for redistricting and other data products for use by the public. DPD also receives data for the Island Area Censuses operation (IAC) from GEOP and the RPO Island Areas Response Processing function (RPO/IARP). IAC data are not applicable to Count Question Resolution operation (CQR) activities, nor are they involved with apportionment or FACO.

All final data products as well as official response data from the 2020 Census are sent to the Archiving operation (ARC) for archival within the Census Bureau and to the National Archives and Records Administration (NARA) for permanent retention. Island Area Censuses' materials and data products and additional information collected during data collection are also archived.

Three other operations support the dissemination of data. The Redistricting Data Program operation (RDP) coordinates the dissemination of redistricting data products to the states. The Integrated Partnership and Communications operation (IPC) provides support in communicating information about the data products. Finally, the CQR provides a mechanism for governmental units to challenge the accuracy of their final 2020 Census counts.

The discussion below walks the reader through the diagram, using the circled numbers to help the reader follow the flow.

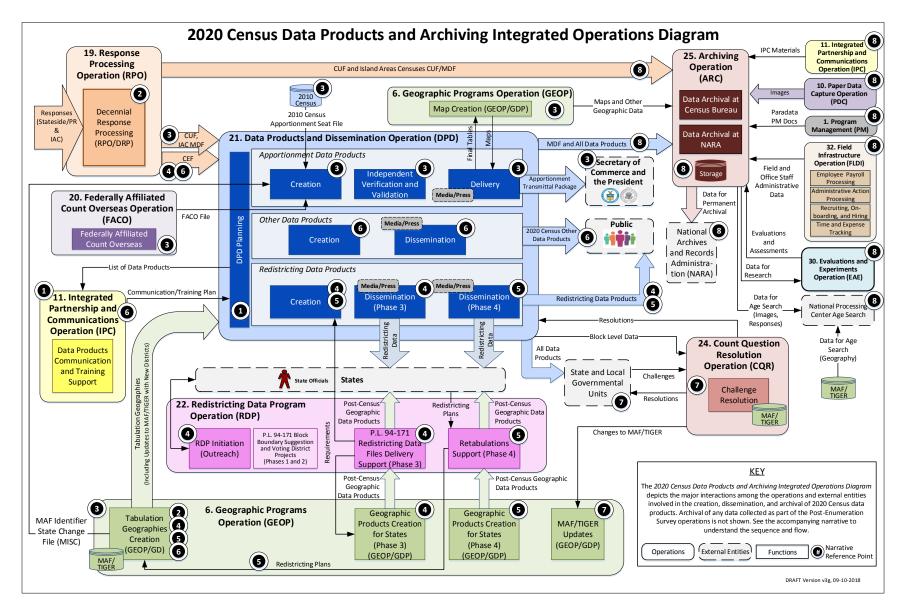


Figure 2: 2020 Census Data Products and Archiving- Integrated Operations Diagram (IOD)

Version 1.0 October 16, 2018 Final

Before the start of the 2020 Census, DPD performs a planning function, creating specifications for the various data products and creating the list of data products and providing it to the IPC so it can create a plan for the training and communications support required to disseminate 2020 Census data products.

Once data collection is complete, the RPO Decennial Response Processing (RPO/DRP) function processes the 2020 Census response data for the 50 states, the District of Columbia, and Puerto Rico (stateside/Puerto Rico data) and creates the Census Unedited File (CUF). The CUF is provided to DPD as input to the apportionment process. The CUF comprises 50 separate files (one for each state), which are used to create the apportionment data products and additional two files for the District of Columbia and Puerto Rico.

CUF is further processed by RPO to produce the Census Edited File (CEF). CEF is provided to DPD, which uses this data to create the Microdata Detail File (MDF). The MDF, which contains microdata (one record per housing unit and group quarters enumeration data), is used by DPD to create the redistricting data products and the other data products.

In addition, the response data from the IAC will be processed by RPO to produce the Island Areas Censuses CUF, Island Areas Censuses CEF, and Island Areas Censuses MDF.

The GEOP Geographic Delineations (GEOP/GD) function creates tabulation geographies and sends these to DPD so it can link the blocks and housing unit records to specific geographies to produce the data products.

Apportionment Data Products

The primary requirement served by the decennial census is the apportionment of seats to the states for the House of Representatives. DPD creates the apportionment counts and delivers them to the President of the United States (through the Secretary of Commerce) to provide to Congress by December 31, 2020.

DPD performs three functions to create the apportionment products: creation, independent verification and validation, and delivery. To create the products, DPD receives, verifies, and tallies the final 2020 Census CUF from RPO and the Master Address File (MAF) Identifier State Change (MISC) File from GEOP to create a final resident population file, which is then combined with the count of federally affiliated people overseas, provided by FACO. Apportionment calculation formulas are then applied and the results are validated to create the final apportionment results. These results go through an independent verification and validation

by Census Bureau staff and are then used to create the final apportionment tables, which illustrate the apportionment population by state and the corresponding number of seats in the U.S. House of Representatives, including the change in seats per state since the 2010 Census Apportionment Seat File was calculated. DPD then creates a memo and a draft letter to the President from the Secretary of Commerce and sends these, with the Final Apportionment Tables, to the Secretary of Commerce. The transmittal package includes three unique tables:

- Apportionment Population and Number of Representatives (for the 50 states).
- Resident Population (for the 50 states, the District of Columbia, and Puerto Rico).
- Federally Affiliated Count Overseas Population (for 50 states and the District of Columbia).

The final tables are also made available to the Geographic Data Processing function within GEOP (GEOP/GDP), which produces map illustrations of the population results. The data and maps are published to the Census Bureau website after a press conference with the media.

Redistricting Data Products

Public Law (P.L.) 94-171 requires the development of redistricting data products to be made available to state officials. RDP is the operation responsible for ensuring that P.L. 94-171 is carried out and serves as the Census Bureau's point of contact for the program, handling all communications and providing training and support to the states for the program.

Halfway through the decade, RDP initiates outreach to the states to invite them to participate in the program and establish a liaison. RDP then conducts the first two phases of the program: the Block Boundary Suggestion Project (Phase 1) and the Voting District Project (Phase 2). These phases are shown in light pink, as they happen before the creation of any data products.

Once the 2020 Census data collection is complete, DPD uses the CEF from RPO to create the 2020 Census MDF. The MDF and geographic data from the GEOP/GDP are used to create the redistricting data files in accordance with requirements provided by RDP. The files go through several processing and review steps before being disseminated. Various embargoes are used to ensure proper timing of the release and receipt of the data. DPD releases the redistricting data to the states, the media, and the public, coordinating the release to the states with RDP to ensure the data are received. RDP also works with GEOP to release geographic data products. GEOP creates the geographic data products in accordance with requirements provided by RDP and then sends these products to RDP, which sends them to the states. This first release of redistricting data products and geographic products is referred to as Phase 3.

Once the states use the 2020 Census data to develop their redistricting plans, Phase 4 of RDP occurs. States send their new redistricting plans (updated congressional districts and state legislative districts) to RDP, which reviews them and provides them to GEOP to update the MAF/Topologically Integrated Geographic Encoding and Reference (TIGER) system with the new districts. GEOP sends the updated congressional and state legislative district tabulation geographies to DPD, which retabulates the 2020 Census redistricting data using the new district boundaries. As with Phase 3, DPD releases the updated data to the states in coordination with RDP. GEOP updates the geographic products and provides them to RDP, which sends them to the states.

Other Data Products

A key service provided by DPD is the development of specific 2020 Census data products for the public. These products go through a two-step process to create and then disseminate the products.

To create the stateside/Puerto Rico data products, DPD uses the 2020 Census MDF created earlier and geographic data from GEOP. The geographic data are used to determine how to structure and layer the data by geographic area (e.g., state, city, and tract). The MDF data are tabulated based on rules and specifications and the tabulated results are reviewed for accuracy. DPD enhances the data and creates data products by generating and applying meta tags and developing geographic and visualization products to make the data more usable. These products are reviewed by subject matter experts and approved by management before being held under public embargo.

In addition to the stateside/Puerto Rico data products described above, DPD also produces a set of data products for the Island Areas Censuses using the Island Areas Tabulation Geography data from GEOP and the Island Areas CUF (IA-CUF) and Island Areas MDFs from RPO.

DPD informs the media of the availability of the data and once the public embargo is released, DPD publishes the data products to the Census Bureau's website. IPC provides a plan for and supports efforts to communicate and demonstrate to data users how the 2020 Census data can be used in their communities.

DPD provides ongoing technical support on these various data products and also receives and responds to customer feedback and inquiries.

Count Question Resolution

The states have a finite period to challenge the counts and provide supporting evidence. This is done through CQR, which works to resolve the governmental challenges by reviewing the block level data products provided by DPD and geographic data in the MAF/TIGER system. The governmental unit and DPD are informed of the resolution to its challenge. Any changes resulting from this activity are reflected in MAF/TIGER, as part of GEOP/GDP; however, the changes do not affect the apportionment or redistricting data. If an issue with the data products does arise, DPD adds a user note and provides the new data in a static table (the files are not regenerated).

Archiving

2020 Census data are required to be archived so that they can be released to the public 72 years after the completion of the census in accordance with Title 44 of the United States Code as amended 92 Stat. 915; Public Law 95-416, October 5, 1978. ARC is responsible for archiving 2020 Census data in accordance with the agreed-upon 2020 Census Records schedule signed by NARA. This includes:

- Individual responses to the 2020 Census.
- Final records used to capture, process, and tabulate respondent data.
- Final records used to collect and update address and map information.
- Planning, management and evaluation files that document policy, decision, and information related to the census, manuals, promotional materials, and evaluation reports.

In addition, ARC stores other data for archival at the Census Bureau, including all paradata and the recruiting, payroll, personnel, hiring, retention, and time and expense data for temporary field and office staff. These data are used for research to support planning that is performed by the Evaluations and Experiments operation (EAE) for future censuses. These data also support legal inquiries related to temporary field personnel. Finally, ARC sends 2020 Census data to the National Processing Center (NPC) to support Age Search, a service to the public that is legally required.

3. Archiving Operation (ARC) Detailed Process Description

Figure 3 is a top-level Business Process Model (BPM) showing the Level 1 activity areas within ARC. BPMs for the 2020 Census follow industry-standard Business Process Model and Notation (BPMN). An explanation of how to read the BPMN notations and a full sized copy of all of the BPMN diagrams for this operation are provided under separate cover.

This top-level BPM serves as the Context Model for ARC. A BPMN Context Model displays the high-level activities within the operation and relationships between them, whereas the IDEFO Context Diagram shown earlier depicts the boundaries of the operation or activity and the interfaces between the operation or activity and other operations and activities with which it is associated.

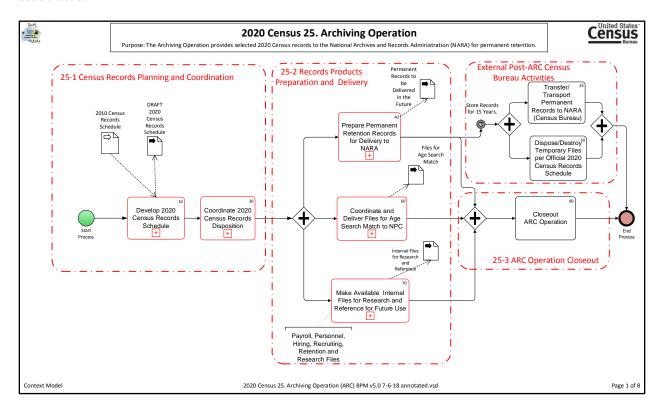


Figure 3: ARC Operation Context Model

The Archiving operation is subdivided into the following Activity Areas.

- Census Records Planning and Coordination [ARC 25-1].
- Records Products Preparation and Delivery [ARC 25-2].
- ARC Operation Closeout [ARC 25-3].

The business processes for each of these Level 1 activity areas are discussed along with their inputs and outputs in the following subsections.

3.1 Census Records Planning and Coordination [ARC 25-1]

Figure 4 shows the BPM for the Census Records Planning and Coordination [ARC 25-1] activity area (area within the gray rounded rectangle) and its constituent activities within the overall context of the Archiving operation.

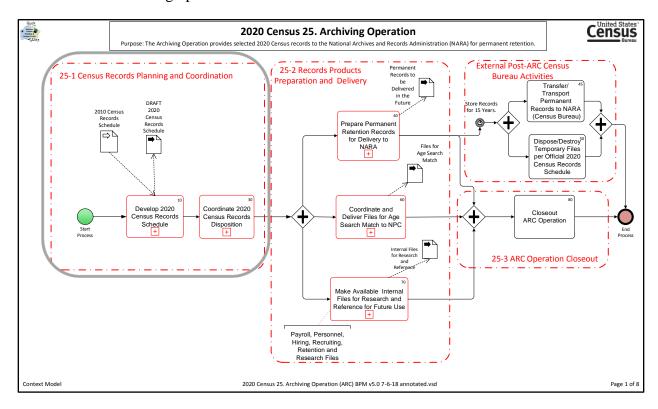


Figure 4: Census Records Planning and Coordination [ARC 25-1] Constituent Activities

The Census Records Planning and Coordination activity area is subdivided into the following operational subactivities.

- Census Records Planning and Coordination [ARC 25-1].
 - o Develop 2020 Census Records Schedule [ARC 25-1.1].
 - o Coordinate 2020 Census Records Disposition [ARC 25-1.2].

The 2020 Census Records Schedule lists all the products from the 2020 Census and their disposition: permanent for posterity to be held by NARA; and temporary to be disposed of after a determined length of time. ARC provides direction that ensures all records have a disposition and are sent to one of the central repositories. These central repositories will hold all 2020

Census records until they need to be transferred to NARA or disposed of properly, in compliance with title regulations.

Subsequent sections describe the Census Records Planning and Coordination operational subactivities in detail.

3.1.1 Develop 2020 Census Records Schedule [ARC 25-1.1]

A detailed view of the constituent activities that make up the "Develop 2020 Census Records Schedule" operational subactivity is given in Figure 5 below.

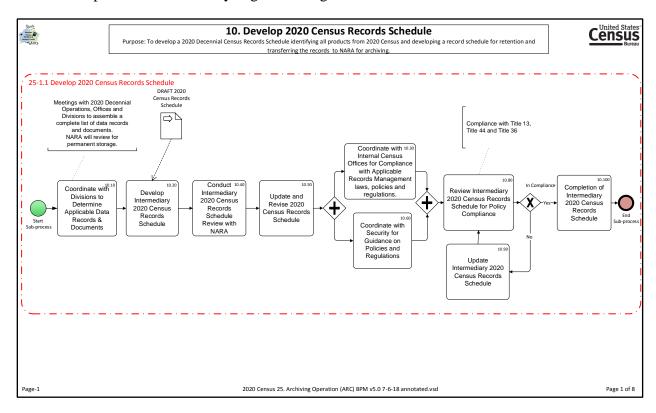


Figure 5: Develop 2020 Census Records Schedule

Developing the 2020 Census Records Schedule includes identifying all the final products that will be created from the 2020 Census. By looking at the last decennial records schedule from 2010 and updating it for 2020, the initial Draft 2020 Census Records Schedule is created. The Draft 2020 Census Records Schedule (version 1) and the updated Intermediary 2020 Census Records Schedule (version 2) are created during the development phase.

Initial recommendations for retention and transfer of the records are included in the Draft 2020 Census Records Schedule. Once the Intermediary 2020 Census Records Schedule is updated, it is then sent to NARA for unofficial review and comment.

Upon receipt of NARA's unofficial comments, the ARC incorporates the changes and sends the document back to internal Census Bureau stakeholders. Stakeholders include Integrated Project Teams (IPTs), decennial leadership, and Census Policy and Security Offices to ensure compliance with applicable records management laws, policies and regulations.

The Intermediary 2020 Census Records Schedule (version 2) is created, reviewed by internal stakeholders, updated and then completed.

3.1.2 Coordinate 2020 Census Records Disposition [ARC 25-1.2]

A detailed view of the constituent activities that make up the "Coordinate 2020 Census Records Disposition" operational subactivity is given in Figure 6 below.

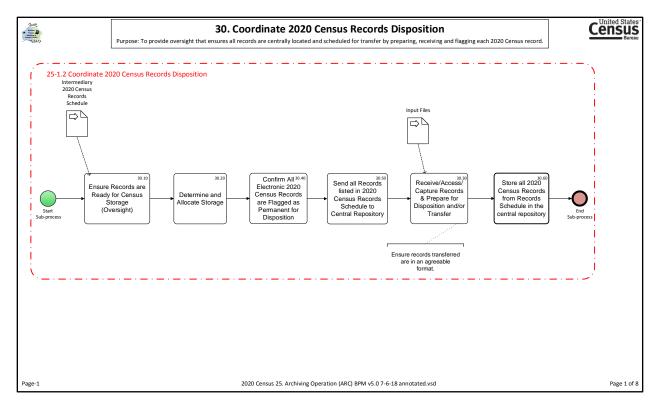


Figure 6: Coordinate 2020 Census Records Disposition

This subprocess provides oversight to ensure all records are sent to a central location, flagged and received by the central repository and then stored in the central repository for up to 15 years (per NARA requirement) before the permanent records are transferred to NARA and the temporary files are destroyed.

The Intermediary 2020 Census Records Schedule is the reference document for the Archiving operation that ensures all records included in the document are stored in a central repository. Based on the new template from NARA for the records schedule, the estimated current volume

for each product is included to ensure that the central repository allocates enough space to be stored until their disposition timeframe is complete.

3.2 Records Products Preparation and Delivery [ARC 25-2]

Figure 7 shows the BPM for the Records Products Preparation and Delivery [ARC 25-2] activity area (area within the gray rounded rectangle) and its constituent activities within the overall context of the Archiving operation.

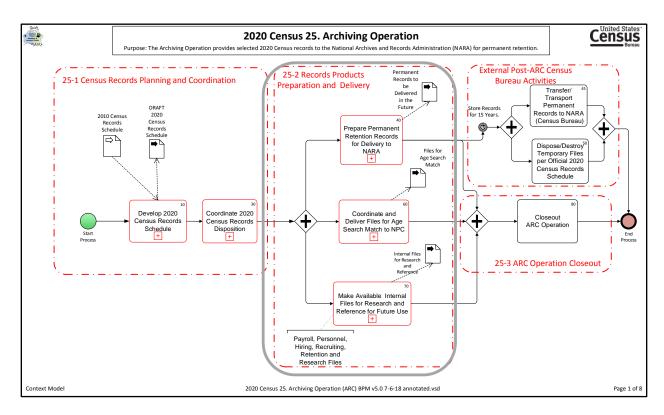


Figure 7: Records Products Preparation and Delivery [ARC 25-2] Constituent Activities

The Records Products Preparation and Delivery activity area is subdivided into the following operational subactivities.

- Records Products Preparation and Delivery [ARC 25-2].
 - o Prepare Permanent Retention Records for Delivery to NARA [ARC 25-2.1].
 - o Coordinate and Deliver Files for Age Search to NPC [ARC 25-2.2].
 - Make Available Internal Files for Research and Reference for Future Use [ARC 25-2.3].

This section explains where necessary 2020 Census files will go to complete the Archiving operation. The Archiving operation focuses on the permanent files that will eventually be transferred to NARA, however, the operation also includes the legally required Age Search service, research and planning for future censuses, as well as referencing files for legal inquiries.

Subsequent sections describe the Records Products Preparation and Delivery operational subactivities in detail.

3.2.1 Prepare Permanent Retention Records for Delivery to NARA [ARC 25-2.1]

A detailed view of the constituent activities that make up the "Prepare Permanent Retention Records for Delivery to NARA" operational subactivity is given in Figure 8 below.

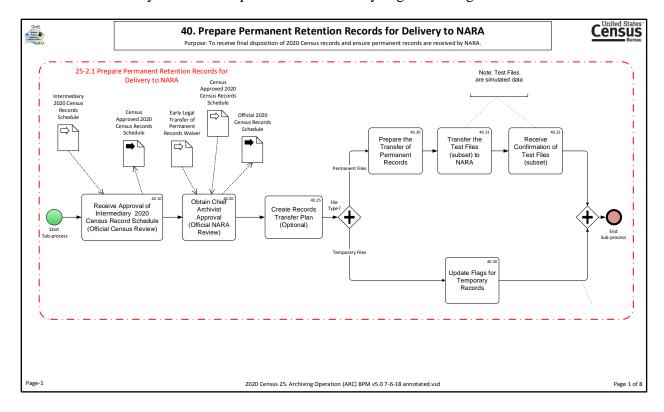


Figure 8: Prepare Permanent Retention Records for Delivery to NARA

This subprocess is to receive final disposition of the 2020 Census records from NARA as well as ensure permanent records are received by NARA.

For the Official Census Review, the Intermediary 2020 Census Records Schedule (version 2) has been written and sent to decennial leadership for review. The Archiving IPT will update the document based on decennial leadership's comments. Once all comments are incorporated, this document is considered the Census Approved 2020 Census Records Schedule (version 3).

In order for the Census Bureau to know what records to send to NARA to be saved for historical purposes, the Census Approved 2020 Census Records Schedule needs to be officially submitted to NARA for review. Additionally, a waiver for Early Legal Transfer of Permanent Records is submitted at the same time. This waiver requests exception to transfer the 2020 Census records earlier than the required 15 years and needs to be approved by NARA. Once NARA receives these two documents from Census, they will review them and commence the appraisal process for the Census Approved 2020 Census Records Schedule.

It is anticipated for NARA's process to be approximately one year to appraise the records schedule and determine the official disposition of all 2020 Census records. For the appraisal process, the Census Bureau submits the Census Approved 2020 Census Records Schedule to NARA. NARA confirms receipt and registers the schedule in their Electronic Records Archive (ERA) system which creates a tracking number associated with each record. NARA archivists will appraise and review the schedule to determine if the proposed disposition instructions are appropriate and if the proposed retention periods are long enough (or deemed permanent to protect the legal rights of the government and private parties). NARA is required by law to publish notice in the Federal Register of schedules proposing a temporary disposition. Members of the public have 30 days from date of publication to request copies of schedules and appraisal reports. Requesters have 30 days from the date the schedule is sent to them in which to submit comments. After NARA and the agency resolve any issues arising from NARA's review and Federal Register publication, the schedule is ready for approval. NARA's Chief Archivist approves schedules proposing changes to retention periods of records previously approved for disposal. The Chief Archivist then approves and signs the schedule. During the appraisal process, Census and NARA will be in communication, responding to questions and determining which records will be saved for posterity.

When the Chief Archivist signs the document, the records disposition (permanent or temporary) is approved and the document is now considered the Official 2020 Census Records Schedule (version 4/final version).

A Records Transfer Plan is an optional plan for records that are scheduled to be transferred outside of normal operations. It is not a required document unless the method of transfer is outside of normal circumstances. A decision will be made in the future if this plan is needed.

The designation of the type of record determines which path the file takes at the intersection. For temporary files, flags in the central repository will be updated from permanent to temporary and a timeframe for disposal will be attached to the records. For permanent files, security reviews of NARA facilities storing Title 13 data and oversight of NARA employees receiving Special Sworn Status occurs, a test of the interface between Census Bureau and NARA systems occurs with simulated data files, and NARA will send the Census Bureau a confirmation of receipt for these simulated data files.

3.2.2 Coordinate and Deliver Files for Age Search to NPC [ARC 25-2.2]

A detailed view of the constituent activities that make up the "Coordinate and Deliver Files for Age Search to NPC" operational subactivity is given in Figure 9 below.

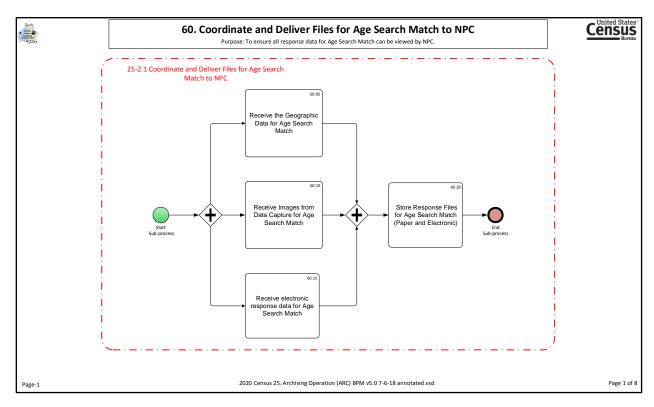


Figure 9: Coordinate and Deliver Files for Age Search to NPC

The Census Bureau provides an age search service to the public as part of the Archiving operation. Confidential records are searched from the federal population censuses from 1910 to the latest census. Census issues an official transcript of the results.

The legally authorized Age Search service is implemented at NPC and assists the Social Security Administration. The Archiving operation ensures that response data, geographic data, and images of paper questionnaires are sent to CIRA system for storage to continue to execute this program.

3.2.3 Make Available Internal Files for Research and Reference for Future Use [ARC 25-2.3]

A detailed view of the constituent activities that make up the "Make Available Internal Files for Research and Reference for Future Use" operational subactivity is given in Figure 10 below.

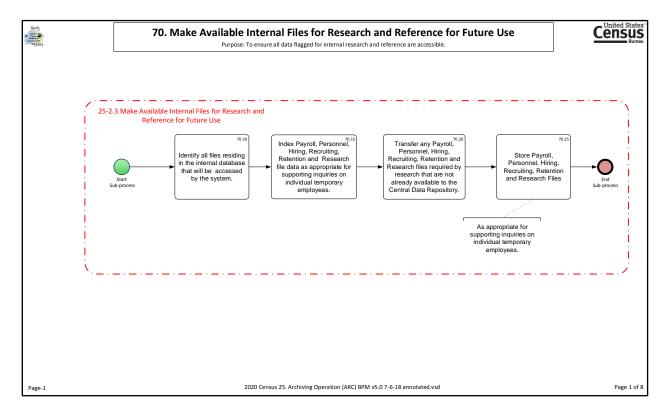


Figure 10: Make Available Internal Files for Research and Reference for Future Use

The Archiving operation covers internally storing research data used for the planning of future censuses. The following human resources data are stored internally: recruiting, payroll, personnel, hiring, and retention. This human resources data will be retrieved for reference throughout the next decade to satisfy legal requirements.

The files that need to be internally stored for research and reference need to be identified and accessed at a later date.

3.3 ARC Operation Closeout [25-3]

Figure 11 shows the BPM for the 3.3 ARC Operation Closeout [25-3] activity area (area within the gray rounded rectangle) and its constituent activities within the overall context of the ARC operation.

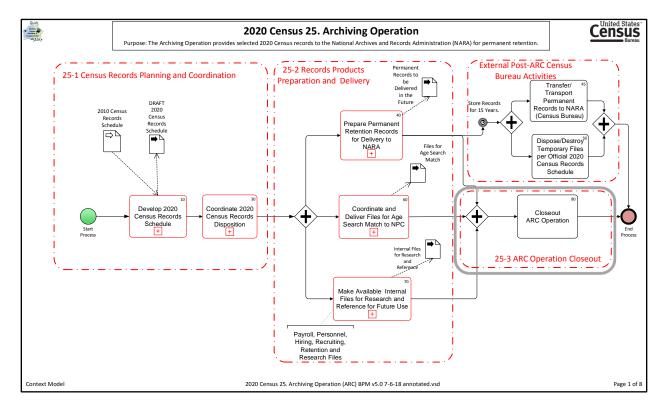


Figure 11: ARC Operation Closeout [25-3] Constituent Activities

Each 2020 Census operation is required to closeout their operation. ARC follows the same structure for this closeout process that includes a final assessment and lessons learned.

Please note that the Archiving operation will closeout shortly after the conduct of the Census; however, the files that need to be transferred to NARA (permanent) or destroyed (temporary) will occur at a later date, up to 15 years.

3.3.1 Closeout ARC Operation [25-3.1]

Refer to Figure 11 for the constituent activities of the "Closeout ARC Operation" operational activity.

The 2020 Census cycle closes in 2023, at which point the archiving responsibility will be transferred from the ARC IPT team to the decennial records manager at the Census Bureau.

Coordination and Monitoring for Final Records Disposition with the Administrative and Customer Service Division (ACSD) Records Manager

Records will either be permanently retained at NARA or temporarily retained at a Census Bureau location (i.e., headquarters, Bowie Computing Center, NPC, field office) for a specified time frame.

For records being archived, the ARC IPT will work with the Census Bureau's records manager (ACSD) to ensure the records are transferred according to the approved records schedule and in the acceptable format. Operations that create records to be archived are also responsible for formatting data to meet NARA standards. The Census Bureau will use corporate processes for the electronic transfer of data and Department of Commerce procedures and policies to transfer data from the Census Bureau to NARA. Any paper documents (this will be minimal, if any) will be physically moved to NARA.

For temporarily retained records, NPC, the RCCs, and the ACOs will follow the destruction of records in accordance with Census Bureau records management policy and procedures. Title 13 records will be destroyed in accordance with Title 13 records disposal policies.

Development of a Program-Wide Records Management Plan for Decennial Headquarters Staff

For documents and files stored at headquarters, the ARC IPT will provide guidance to decennial divisions on records management.

The Decennial Census Management Division is responsible for the overall archiving program management related to the requirements, schedule, budget, and progress for the 2020 Census.

3.4 External Post-ARC Census Bureau Activities

Figure 12 shows the BPM for the External Post-ARC Census Bureau Activities activity area (area within the gray rounded rectangle) and its constituent activities. These activities occur after the ARC Operation Closeout and are described here for completeness.

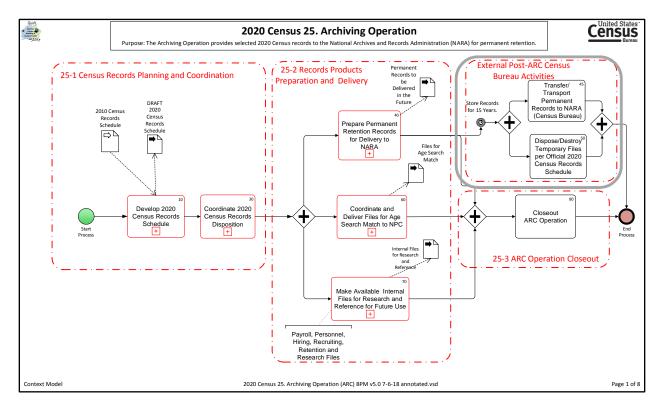


Figure 12: External Post-ARC Census Bureau Activities

The ARC IPT oversees the Archiving operation until September 30, 2023. Afterward, the central repositories continue to store the 2020 Census records and the oversight provided by the Archiving operation is transferred to the records manager in the Decennial Census Management Division.

In the future, after the Archiving operation has closed out and after the appropriate timeline is determined in the Official 2020 Census Records Schedule, the decennial records manager is responsible to complete the following:

- 100 percent of the required census records are delivered to and accepted by NARA for archiving.
- All of the 2020 Census records designated for destruction (as outlined in the Official 2020 Census Records Schedule) are destroyed according to applicable policies and procedures.

3.4.1 Deliver Data to NARA

The Census Bureau's policy on records storage of key items is as follows:

 Permanent records – Records preserved for historical value and eventually transferred to NARA.

- *Temporary records* The Census Bureau assigns temporary records a minimum retention period and destroys them after that period. Records Schedules dictate their disposal.
- *Electronic media records* The Census Bureau treats electronic media record like paper records, either permanent or temporary. The permanent records are kept in a transportable format as required by NARA and Title 36, CFR. The Census Bureau retains necessary documentation for using the file and stores the file in a properly protected area.

All records that have not yet been scheduled or evaluated by NARA, must be stored in accordance with the requirements of Title 5, Title 13, Title 26, Title 36, CFR, Section 1228.188, and Title 44. The files must be stored in a technologically current format for as long as they remain in Census Bureau custody.

When the retention period for each 2020 Census record has been reached, the Census Bureau will transfer the file to NARA for posterity. ACSD will liaise the process to ensure proper procedures are followed, for instance including NARA's tracking number on each record generated by their ERA system.

4. Cost Factors

4.1 Background

Investment in ARC is necessary to support legislative and constitutional mandates and will require funding for the 2020 Census records up to 15 years after the 2020 Census. This supports all archiving solutions that will influence the cost and quality of the 2020 Census.

4.2 Relevant IDEF0 Mechanisms

While ARC is not a major cost driver for the 2020 Census, the following mechanisms from the IDEF0 Context Diagram represent the resources used to support this operation and comprise part of the 2020 Census cost elements:

Staff

HQ Staff.

<u>Sites</u>

HQ.

Systems

- CIRA.
- DAPPS.
- DMS.
- CDL.
- DSS:Feith.

Other

- Office IT Infrastructure.
- Census Networks.

5. Measures of Success

For the 2020 Census operations, the corresponding Measures of Success will be documented in the operational assessment study plans and final reports. The operational assessment study plan documents the criteria that will be used to define successful completion of the operation. The operational assessment report will provide results on whether the criteria were met.

In general, operational assessments report on planned to actual variances in budget, schedules, and production and training workloads. The corresponding Measures of Success (as documented in the operational assessment study plan) include variances that exceed established thresholds. See *Preparing for the 2020 Census Operational Assessments Study Plan* for the potential scope of assessment.

Types of success measures include:

- Process Measures that indicate how well the process works, typically including
 measures related to completion dates, rates, and productivity rates, if applicable.
- **Cost Measures** that drive the cost of the operation and comparisons of actual costs to planned budgets. Costs can include workload as well as different types of resource costs, if applicable.
- **Measures of the Quality** of the results of the operation, typically including things such as rework rates, error rates, and coverage rates, if applicable.

Appendix A – Acronyms and Terminology

Table 7 lists the acronyms and abbreviations used within this Detailed Operational Plan document.

Table 8 lists a Glossary of Terms used within this Detailed Operational Plan document.

Table 7: Acronyms and Abbreviations List

Acronym	Meaning
ACSD	Administrative and Customer Service Division
ACO	Area Census Office
ARC	Archiving operation
BPM	Business Process Model
BPMN	Business Process Model and Notation
CDL	Census Data Lake
CEF	Census Edited File
CFR	Code of Federal Regulations
CIRA	Census Image Retrieval Application
COOP	Continuity of Operations
CQA	Census Questionnaire Assistance operation
CQR	Count Question Resolution operation
CUF	Census Unedited File
DAPPS	Decennial Applicant, Personnel and Payroll System
DBO	Decennial Budget Office
DMS	Data Management System
DPD	Data Products and Dissemination operation

Acronym	Meaning	
DRP	Decennial Response (Data) Processing	
DRPS	Decennial Response Processing System	
EAE	Evaluations, Assessments and Experiments operation	
ERA	Electronic Records Archives system	
FACO	Federally Affiliated Count Overseas operation	
GEOP	Geographic Programs operation	
GEOP/GD	GEOP Geographic Delineations	
GEOP/GDP	GEOP Geographic Data Processing	
HQ	Headquarters	
IA CUF	Island Areas CUF	
IAC	Island Areas Censuses operation	
IA ICRF	Island Areas ICRF	
IARP	Island Areas Response Processing	
ICRF	Individual Census Record File	
IDEF0	Integrated Definition, Level 0	
IOD	Integrated Operations Diagram	
IPC	Integrated Partnership and Communications operation	
IPT	Integrated Project Team	
ISR	Internet Self-Response operation	
IT	Information Technology	
MAF	Master Address File	
MAF/TIGER	Master Address File/ Topologically Integrated Geographic Encoding and Reference system	

Acronym	Meaning
MDF	Microdata Detail File
MISC	MAF Identifier State Change File
NARA	National Archives and Records Administration
NFC	National Finance Center
NPC	National Processing Center
PCO	Policy Coordination Office
PDC	Paper Data Capture operation
PES	Post-Enumeration Survey
P.L.	Public Law
PM	Program Management operation
RCC	Regional Census Center
RDP	Redistricting Data Program operation
RPO	Response Processing operation
RPO/DRP	RPO Response Data Processing
RPO/IARP	RPO Island Areas Response Processing function
SPC	Security, Privacy, and Confidentiality operation
TIGER	Topologically Integrated Geographic Encoding and Reference system
U.S.	United States

Table 8: Glossary of Terms

Term	Meaning	
Permanent records	Permanent records have enduring value. Examples include those that document the organizations, functions, policies, decisions, procedures, and essential transactions of the Census Bureau or contain information of significant historical, legal, or research value. These records are offered to the NARA according to their disposition authority.	
Temporary records	Temporary records do not have sufficient value to justify permanent retention and are destroyed. DAO 205-1, Section 2, provides additional definitions regarding types of records.	
Unscheduled records	Unscheduled records are records whose final disposition has not been approved by NARA. Unscheduled records may not be destroyed or deleted.	
Vital records	Vital records are the Census Bureau's most essential and irreplaceable records that are needed to meet operational responsibilities under national security emergencies or other emergency, or disaster conditions (emergency operating records) and to protect the legal and financial rights of the government and those affected by government activities (legal and financial rights records). See Title 36, CFR, Section 1236.14. These records are also located in the Census Bureau's COOP plan.	
Nonrecords	Government-owned informational material that are excluded from the legal definition of records—such as personal papers, magazines and journals, extra copies of documents kept only for convenience of reference, stocks of publications and library or museum materials intended solely for reference or exhibition.	
Electronic records	Electronic records are created, used, maintained, transmitted, and disposed of in electronic form. They consist of information in various formats, including textual documents such as processing files or electronic mail messages, images such as maps or pictures, World Wide Web content, and computer code. Electronic records may be stored in computer memory or on an approved storage media. They may or may not have paper backup.	
Email records	Email records can either be temporary or permanent. Once a record has been determined if it's permanent or temporary, execute the current policy for email records based on the Presidential Directive Managing Government Records Directive (M-12-18), which mandates federal agencies to manage all email records in an electronic format, until the retention period has been met according to the appropriate records schedule (<i>type of Electronic record</i>).	
Capstone officials	Capstone Officials are senior officials. This includes officials at or near the top of the Department of Commerce and the Census Bureau. This includes but is not limited to GS-15s and above. All email records for Capstone Officials are considered permanent.	

Term	Meaning	
Records schedules	Records schedules provide retention and disposition instructions for Census Bureau records. NARA requires the Census Bureau to save all records identified as "permanent," including records stored in electronic media. The records schedules provide guidance for both types of records (permanent or temporary) and for the storage or disposition of each type.	
General records schedule	These schedules, published by NARA, govern the retention and disposition of administrative records common to all federal agencies (type of records schedule).	
Census Bureau records schedules	These schedules govern the retention and disposition of program records.	
Records management	Records management is the process for the systematic control of the creation, maintenance, use, and disposition of records, following statutory and regulatory requirements. It addresses the complete life cycle of records. This process contributes to the smooth operation of agency programs by making information readily available; provides continuity in the event of a disaster; protects records from inappropriate and unauthorized access and; meets statutory and regulatory requirements, including archival, audits, and oversight activities.	
Archiving	Records determined by the National Archives and Records Administration (NARA) as having sufficient historical or other archival value to warrant continued preservation by the federal government beyond the time they are needed for administrative, legal, or fiscal purposes. These records are permanently retained by and at NARA.	

Appendix B – References

Appendix B lists the documents or other resources used during the development of this Detailed Operational Plan document.

- U.S. Census Bureau (2017), "2020 Census Operational Plan," Version 3.0, October 27, 2017.
- U.S. Census Bureau, "Preparing for the 2020 Census Operational Assessments Study Plan," Draft, May 10, 2018.
- U.S. Census Bureau (2018), "The '72-Year Rule," March 02, 2018.

Appendix C – Activity Tree for Archiving Operation (ARC)

This appendix presents the Activity Tree for the ARC operation. An Activity Tree uses an outline structure to reflect the decomposition of the major operational activities in the operation. Each activity is numbered according to its position in the outline. For example, for the current operation numbered "25," the first activity would be numbered 25-1. Subactivities under this activity would be numbered sequentially, starting again with the number one. For example, the first subactivity under the first activity would be numbered 25-1.1 the second subactivity as 25-1.2. The second activity would be numbered 25-2, and so on.

ARC Activity Tree:

- 25-1 Census Records Planning and Coordination.
 - o 25-1.1 Develop 2020 Census Records Schedule.
 - o 25-1.2 Coordinate 2020 Census Records Disposition.
- 25-2 Records Products Preparation and Delivery.
 - o 25-2.1 Prepare Permanent Retention Records for Delivery to NARA.
 - o 25-2.2 Coordinate and Deliver Files for Age Search to NPC.
 - o 25-2.3 Make Available Internal Files for Research and Reference for Future Use.
- 25-3 ARC Operation Closeout.

Appendix D – NARA and Census Correspondence, 1952

1952 Exchange of Correspondence Between the Director of the Bureau of Census and the Archivist of the United States¹

(Referenced in 44 U.S.C. § 2108(b))

Department of Commerce Bureau of Census Washington, D.C. August 26, 1952

Dr. Wayne C. Grover Archivist of the United States Washington, D.C.

Dear Dr. Grover:

It is the policy of the Bureau of the Census to provide the maximum physical protection for the records which document its major programs, and make available to as many people as possible the information contained in such records consistent with national security and the rights of individuals concerned. With these ends in mind, we wish to make the following proposals concerning the custody, maintenance and use of the records of individuals enumerated in decennial population censuses:

The Bureau of the Census will transfer to the National Archives and Records Service (1) the original schedules of each decennial population census when they are no longer required by the Bureau of the Census for active statistical use and when the National Archives and Records Service can provide space and service for them; (2) the negative microfilm of such schedules when the Bureau of the Census has obtained a positive copy of the microfilm; and (3) the

¹ Page URL: http://www.archives.gov/about/laws/1952.html. The U.S. National Archives and Records Administration, 8601 Adelphi Road, College Park, MD 20740-6001; Telephone: 1-86-NARA-NARA or 1-866-272-6272.

positive microfilm of these schedules when they are no longer required by the Bureau of the Census in its personal census service activities.

The Bureau of the Census desires that the National Archives and Records Service observe the following provisions pertaining to the use and maintenance of these records subsequent to their transfer:

A. All negative microfilm copies of decennial population census schedules transferred to the National Archives and Records Service shall be preserved as the permanent records of such censuses. These negative copies will not be used as searching media or inserted in reading devices except when necessary for inspection incident to the proper maintenance of such records.

B. The National Archives and Records Service will, upon request by the Bureau of the Census, furnish positive prints of any negative microfilm which has been transferred to the former agency. The charge for this service will be the cost of the positive film and its development, plus a service charge of not more than ten percent.

C. At no time after the National Archives and Records Service has accepted custody of both the negative and positive microfilm copies of the schedules of a census will both negative and positive copies of that census be kept in the same city.

D. After the lapse of seventy-two years from the enumeration date of a decennial census, the National Archives and Records Service may disclose information contained in these records for use in legitimate historical, genealogical or other worth-while research, provided adequate precautions are taken to make sure that the information disclosed is not to be used to the detriment of any of the persons whose records are involved. Prior to the lapse of time specified above, the information will be disclosed only by the Bureau of the Census from microphotographic or other records in its possession.

Please let us know if these provisions are acceptable to you. If they are, we shall make the necessary arrangements to effect the movement of records now eligible for transfer.

Sincerely	yours,

Roy V. Peel, Director.

October 10, 1952

Dr. Roy V. Peel
Director, Bureau of the Census
Department of Commerce, Washington, D.C.

Dear Dr. Peel:

This is in reply to our offer to transfer periodically to the National Archives and Records Service the original schedules of each decennial population census when these are no longer needed for active statistical use, the negative microfilm of those population census schedules for which the Bureau of the Census possesses adequate positive microfilm copies, and the positive microfilm copies of those population census schedules which the Bureau of the Census no longer desires to retain for reference use.

In view of the established policy of the National Archives and Records Service to relieve agencies of records accumulations no longer needed for current use, and to preserve those records deemed to be of permanent value, I am, in principle, in agreement with the transfer policy stated in your letter of August 26, 1952.

I am also in agreement with the conditions you state with respect to the use and maintenance of these records (1) that the master set of negative microfilm to be transferred shall be preserved as the permanent records of the decennial population census schedules, and that the master negatives and the positive microfilm copies shall not be kept in the same city; (2) that the National Archives and Records Service will furnish the Bureau of the Census with positive prints of the negative microfilm whenever requested, and that the charge for such service shall not exceed the cost of the positive film and its development plus an overhead of not more than ten percent, provided, however, that the production of the initial set of positive microfilm copies of a decennial population census shall be the responsibility of the Bureau of the Census; and (3) that after "seventy-two years from the enumeration date of a decennial census, the National Archives and Records Service may disclose information contained in these records for use in legitimate historical, genealogical or other worth-while research."

With respect to the foregoing restrictions on disclosure of information it is understood that the applicable conditions of legitimacy will be those now in force, (1) a searcher's reputation as in fact a research worker or professional genealogist; (2) a searcher's connection with an established institution of learning or research; (3) a searcher's connection with the person or family whose records are desired, either by immediate relationship or by authorization; and (4) the lapse of time since the appearance of possibly detrimental information, considered in

conjunction with the legitimacy of public or scholarly interest in the factual data relating to a historical personage.

In accordance with these mutually acceptable provisions, at your convenience we are prepared to make the necessary arrangements to effect the movement of records now eligible for transfer.